

WE CLAIM:

1. An electric motor comprising
a stator;
a rotor supported for rotation within the stator;
a pre-formed cylindrical composite can member removably affixed to one of the stator and rotor; and
at least one sealing ring for sealing the cylindrical can member to the member to which it is affixed.
2. An electric motor according to claim 1 wherein the composite can member is removably affixed by screws.
3. An electric motor according to claim 1 wherein the composite can member has a surface facing a space between the rotor and the stator in which ridges are formed to control flow of liquid through the space.
4. An electric motor according to claim 3 in which the ridges extend circumferentially around the surface of the composite can member facing the space between the rotor and the stator.
5. An electric motor according to claim 3 wherein the composite can member is affixed to the rotor and wherein the ridges extend at an angle to a plane perpendicular to the axis of the rotor.
6. An electric motor according to claim 1 wherein the composite can member comprises a fiber-reinforced polymer material.

7. An electric motor according to claim 6 wherein the fibers in the polymer material are selected from the group consisting of glass, aramid, carbon, polyester and quartz fibers.
8. An electric motor according to claim 6 wherein the fiber-reinforced composite can member is made by a technique selected from the group consisting of dry lay-up resin transfer molding, wet and pre-impregnated, filament winding techniques.
9. An electric motor according to claim 1 wherein the stator comprises a plurality of removably connected components and the composite can member is affixed to the inner surface of the stator by mechanical connectors and wherein the rotor includes an outer can member made of composite material formed by winding the material onto the surface of the rotor.